

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior listings and versions:

1. (currently amended) An isolated autotransporter and antigenic polypeptide for use as an autotransporter antigen, the polypeptide comprising the amino acid sequence shown in SEQ ID NO: 55 or SEQ ID NO:86.

2. (original) The polypeptide of claim 1 where use is as an antigen for raising a *Chlamydia pneumoniae* specific immune response.

3. (original) The polypeptide of claim 2 wherein the use is for raising a systemic immune response in an individual infected with *Chlamydia pneumoniae*.

4. (previously presented) The polypeptide of claim 1 which is secreted into the cytoplasm of the host cell through a Type V autotransporter secretion system mechanism.

5 to 10. (canceled)

11. (withdrawn) A method of eliciting an immune response in an individual comprising administering to the individual a polypeptide according to claim 1.

12. (withdrawn) A method of diagnosing an immune response in an individual comprising:

(a) contacting a biological sample obtained from the individual with a binding agent that binds to a polypeptide according to claim 1;

(b) detecting in the biological sample the amount of the polypeptide that binds to the binding agent; and

(c) comparing the amount of the polypeptide to a predetermined cut-off value and thereby determining the presence of an immune response in the individual.

13 to 14. (canceled)

15. (previously presented) A composition for eliciting an immune response comprising a polypeptide according to claim 1 and one or more immunostimulants.

16 to 17. (canceled)

18. (previously presented) The composition according to claim 1, comprising at least two immunogenic.

19 to 20. (canceled)

21. (withdrawn) A method of making an immunogenic composition the method comprising the step of combining one or more polypeptides according to claim 1 with one or more immunostimulants.

22 to 25. (canceled)

26. (withdrawn) The polypeptide according to claim 1, wherein the polypeptide comprises an amino acid sequence corresponding to SEQ ID NO: 86.

27. (canceled)

28. (withdrawn) The method of claim 11, wherein systemic immune response is elicited in an individual infected with Chlamydia pneumoniae.

29. (canceled)

30. (withdrawn) A method of raising an immune response in an individual, the method comprising administering to the individual a polypeptide according to claim 26.

31. (withdrawn) A method of diagnosing an immune response in an individual, the method comprising:

(a) contacting a biological sample obtained from an individual with a binding agent that binds to a polypeptide defined in claim 26;

(b) detecting in the sample the amount of the polypeptide that binds to the binding agent;
and

(c) comparing the amount of polypeptide to a predetermined cut-off value and thereby
determining the presence of an immune response in the individual.